R0233

Dear National Fire Academy Student:

Congratulations on being selected to attend the National Fire Academy's (NFA's) *Chemistry for Emergency Response* (CER) course.

This course is designed for emergency services personnel and inspection personnel who have an interest in understanding how and why materials act in relation to the application of science to a hazardous materials/ Chemical, Biological, Radiological, Nuclear and Enhanced incident. It seeks to convey to responders or inspectors a sound understanding of the basic chemistry of hazardous materials in order to permit them to correctly assess a potential threat and make "risk-based" decisions.

The focus of the course is on response chemistry, using a building-block approach for each chemical family, beginning with basics and adding and applying skills as the course progresses.

Prior to your arrival, you should complete the *Foundational Concepts of Chemistry* (Q0228) self-study course. This course is available through NFA Online at www.nfaonline.dhs.gov.

This course combines lecture, discussion, group and individual activities with problem solving sessions and proficiency-based assignments. A 2-hour evening practice session is expected every day. There are quizzes every morning on material covered the previous day. Students are expected to participate and actively engage in the interactive course methodology throughout the 2 weeks, complete nightly homework assignments, and study for quizzes and exams. **Students should bring a calculator to class.**

To alleviate some of the time necessary to learn the material, it is advised that you memorize the following chemical symbols.

Hydrogen	Н	Mercury	Hg
Sodium	Na	Tin	Sn
Lithium	Li	Copper	Cu
Potassium	K	Chromium	Cr
Magnesium	Mg	Carbon	C
Calcium	Ca	Nitrogen	N
Barium	Ba	Phosphorus	P
Boron	В	Oxygen	O
Aluminum	Al	Sulfur	S
Lead	Pb	Fluorine	F
Cobalt	Co	Chlorine	Cl
Iron	Fe	Bromine	Br
Iodine	I		

End-of-class graduation ceremonies are an important part of the course, and you are expected to attend. Please do not make any travel arrangements to leave campus until after you and your classmates graduate.

Increasing numbers of students and instructors are bringing laptop computers or other electronic devices to campus. You alone are responsible for the security and maintenance of your equipment. The Academy cannot provide you with computer software, hardware, or technical support to include disks, printers, scanners, etc. There are a limited number of 120 volt AC outlets in the classrooms. Thumb drives or external hard drives used to bring course materials to class cannot be connected to FEMA property without being scanned for viruses. Due to time limitations for scanning, these devices cannot be larger than 8 GB. Anything over this amount will not be scanned and cannot be used. A Student Computer Lab is located in Building D and is available for all students to use. It is open daily with technical support provided in the evenings. This lab uses Windows 7 and Office 2010 as the software standard.

Should you need additional information related to the course, please contact Mr. Wayne Yoder, Hazardous Materials Curriculum Training Specialist, at (301) 447-1090 or email at wayne.yoder@fema.dhs.gov.

Sincerely,

Dr. Denis Onieal, Superintendent

National Fire Academy U.S. Fire Administration